REMARKS:

Claims 44 and 60-62 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,144,962 ("Weinberg"). In response, Applicant contends that claims 44 and 62, claims 60 and 61 as amended, and new claims 82-85 are patentable over Weinberg for the following reasons.

Weinberg fails to teach or suggest displaying a sea of node representations viewed from a point of view, wherein said sea of node representations includes "virtual reality renderings" as recited in claim 44. As explained in the specification, virtual reality renderings model data as physical objects in 3D (three dimensional) space. The Examiner apparently contends that display of "virtual realty" renderings broadly denotes any display indicative of data that allows a user to "visualize, manipulate and interact with computer for a set of data." Applicant respectfully contends that this is an unreasonably broad construction of the expression to display "virtual reality renderings," since it covers any display provided by a user interface. The expression "virtual reality rendering" is not synonymous with "any" display generated by a user interface, and instead denotes a computer representation of what we call "reality," i.e., the real, physical world, or a world that is perceived as a real, physical world by one viewing the rendering. The displays taught by Weinberg are conventional displays of the type generated by user interfaces; not representations of what the viewer would perceive as "reality" and are thus not virtual reality renderings. Weinberg's teaching (e.g., at col., 10, lines 55-64) to generate a "Visual Web Display" that allows the user to visualize relationships between "data entities" of complex Web structures, is merely a teaching to provide a user interface that generates displays of the type shown in Weinberg's figures; not a teaching to display "virtual reality renderings" as recited in claim 44.

Weinberg also fails to teach or suggest a method for associating linked nodes, including by storing a single link identification in each node of a set of nodes to identify each of the nodes in the set as being linked to another one of the nodes in the set, thereby associating the nodes that are identified by said

single link identification, as recited in amended claim 60. Applicant is unable to identify any suggestion in Weinberg, at cited FIGS. 1-4 or col. 12, lines 17-21 or elsewhere, of this limitation of claim 60. For example, each node described at Weinberg's col. 12, lines 17-21 apparently contains merely an address (URL) of an object (a "first" object) on the World Wide Web, a set of addresses (also URLs) of other objects linked to the first object, and an indication of whether the object is a "home page." There is no suggestion determinable from Weinberg that a node described at Weinberg's col. 12, lines 17-21 (or elsewhere in Weinberg) does or should contain a link identification as recited.

Weinberg also fails to teach or suggest a method of establishing a set of linked nodes from data organized in rows and columns with column headings, including a step of:

representing each of the column headings by an abstract node (as recited in claim 62) and representing each cell of the data by a data node (as recited in claim 62); or

establishing links between each said abstract node and each data node that corresponds to a cell in a column whose column heading is represented by said abstract node (as recited in claim 62).

Applicant is unable to identify any suggestion in Weinberg, at cited FIG. 1 or 4 or col. 16, lines 40-57 or elsewhere, to represent each of column headings (of the recited type) by an abstract node. For example, Weinberg does not teach or suggest representing the word "Annotation" or any other column heading in lower window 78 of Weinberg's FIG. 4 as an abstract node. It cannot reasonably be contended that upper window 76 of Weinberg's FIG. 4 display represents an "abstract node." Even if one assumes for the sake of argument that window 76 somehow represents an abstract node, it cannot reasonably be contended that Weinberg teaches linking such abstract node to data nodes as recited in claim 62. If window 76 is a representation of "an" abstract node, no element of the FIG. 4 display other than window 76 can reasonably be considered to be a representation of a "data node" as claimed. If window 76 includes representations of data nodes as claimed, no element of the FIG. 4 display can reasonably be considered to be a representation of an abstract node "linked" to such data nodes.

Applicant is unable to identify any suggestion in Weinberg of linked nodes, with at least one of the nodes including at least two links to another one of the nodes, as recited in claim 82.

Applicant is unable to identify any teaching or suggestion in Weinberg of structuring data for display as a sea of node representations, viewed from a point of view, including by rendering at least one of the nodes (other than the point of view) with at least one feature indicative of a relationship between the point of view and said at least one of the nodes, as recited in claim 84.

Claim 81 stands rejected under 35 U.S.C. 102(e) as being anticipated by Weinberg in view of U.S. Patent 5,515,487 ("Beaudet"). In response, Applicant contends that claim 81 is patentable over Weinberg and Beaudet, considered individually and in combination, for the following reasons.

Claim 81 recites that at least some of the nodes (of the recited set of linked nodes) are linked with links that determine at least one cyclic loop. When links between nodes determine a cyclic loop (e.g., a first node is linked to a second node, the second node is linked to a third node, and the third node is linked to the first node) and one of nodes is designated as a point of view, the shortest (smallest) number of links from the point of view to the other nodes can be calculated on the fly and representations of the nodes displayed (in accordance with the embodiment of claim 81) as a sea of node representations viewed from the point of view with each of the other nodes appearing as linked to the point of view by the smallest number of links consistent with the calculation. Weinberg neither teaches nor suggests displaying representations of nodes that are linked with links that determine at least one cyclic loop as recited in claim 81.

Although Beaudet in a very general sense teaches nodes linked by links that determine a cyclic loop, it does not teach designating any of the nodes as a point of view or displaying representations of the nodes as a sea of node representations viewed from the point of view. Neither Weinberg nor Beaudet teaches or suggests how to display representations of nodes (linked by links that

determine a cyclic loop) as a sea of node representations viewed from a point of view, or that it would be desirable to modify Weinberg's teaching to reach the invention of claim 81. There is no basis determinable from the art of record for the argument that it would have been obvious to one of ordinary skill in view of Beaudet to modify Weinberg's teaching (or to modify Beaudet's teaching in view of Weinberg) to reach the invention of claim 81.

Cyclic loops pose a significant problem in computing and are a different class of networks than those considered by Weinberg. If a first node were linked by multiple links (that determine a cyclic loop) to a second node, one of ordinary skill in the art would not have modified Beaudet's teaching as to how to display representations of nodes including such nodes, including by designating the first node as a point of view and attempting to display a sea of node representations (including representations of the first and second nodes) viewed from the point of view for the purpose of retaining "information concerning all nodal interconnections" to the first node (as suggested by the Examiner). Rather, the process of displaying such a sea of node representations (viewed from the point of view) would tend to suppress or obscure some of the information concerning the links between the second node and the first node, because in the sea, the representation of the second node would appear as if linked by one non-branched link to the first node; not as if linked by each of the multiple non-branched links to the first node consistent with the cyclic loop.

For the foregoing reasons, each of claims 44, 60, 62, and 81, as amended, each claim depending directly or indirectly therefrom any of them,

and each of new claims 82-85 is patentable over the cited art. Consideration and allowance of claims 44, 60-62, 66, and 81-85 is respectfully requested.

Respectfully submitted,
GIRARD & EQUITZ LLP

Dated: 06/18/2010

By: /Alfred A. Equitz/
Alfred A. Equitz
Reg. No. 30,922

Attorneys for Applicant(s)

Attorney Docket No. RKNV-111